

## Safety Advisory Committee

February 3, 2012

1:30 – 3:30 PM

### Minutes

Committee Member	Representing	Present
Anderson, Erik	Materials Sciences Division	X
Bello, Madelyn	Human Resources Advisor	X
Blodgett, Paul M.	Environment, Health and Safety Division	
Cademartori, Helen	Information Technology Division	
Carithers, William	Physics Division	
Christensen, John N.	Earth Sciences Division	X
Floyd, Jim	Safety Advisory Committee Chair	X
Franaszek, Stephen	Genomics Division	
Fujikawa, Brian	Nuclear Science Division	X
Lidia, Steve	Accelerator & Fusion Research Division	X
Lukens Jr., Wayne W.	Chemical Sciences Division	
Lunden, Melissa	Environmental Energy Technologies Division	
Martin, Michael C.	Advanced Light Source Division	
More, Anil V.	Office of the CFO Advisor	
Taylor, Scott E.	Life Sciences Division	
Tucker, Eugene	Facilities Division	X
Thomas, Patricia M.	Safety Advisory Committee Secretary	X
Walter, Howard	Computing Sciences Directorate	
Wong, Weyland	Engineering Division	

**Others Present:** Kim Abbott, Michael Carr, Howard Hatayama, Julie Henderson, David Kestell, Mike Kritscher, Jim Krupnick, Peter Lichty, Scott Robinson, Andreas Schmid, Theresa Triplett, Bill Wells, Marty White

### Comments from the Chair – Jim Floyd

- **Peer reviews** – The Peer Review for Environmental Energy Technologies Division (EETD) is in progress. The Peer Review for Nuclear Science Division is expected to start in April or May. Engineering Division will be next, after their Division Review.
- **Traffic safety** has been added to the list of priorities for SAC attention, at the request of Paul Alivisatos. Jim Dahlgard and Richard DeBusk will link their efforts with those of SAC and the Division Safety Coordinators.

## **Area Personal Protective Equipment (PPE) – Marty White**

The PPE subcommittee looked at how the policy regarding use of Personal Protective Equipment in technical areas and food/beverage restrictions was rolled out. Subcommittee members were Mike Wisherop (EHS), Mike Johnson (NSD), Thorsten Weber (CSD), Joni Mott (LSD), Prabir Roy (AFRD), Bob Mueller (EG), Jim Floyd (ALS), and Marty White (EHS, NSD & Ph). They discovered that the actual policy in PUB-3000 Chapter 19 differs from how it was implemented. The policy requires minimum PPE (protective eyewear, long pants, closed-toed shoes) in laboratories where chemical or biological materials are stored or handled and in machine shops. Area Safety Leaders should determine the area PPE requirements for their assigned technical areas and ensure that entrances are posted.

The subcommittee recommended modifying the way the policy is implemented to allow:

- Area Safety Lead (ASL) to set minimum PPE requirements for low-hazard technical areas, in some cases with EHS review;
- Flexibility to designate different technical areas within a room, with ISM ownerships and clear physical differentiation;
- Short duration suspensions of area PPE requirements in cases of tours, as long as the work creating the area hazards is also suspended;
- ASL to make food/drink policy for other technical areas, in some cases with EHS review;
- Food/drink to be transported through areas where food/drink are not allowed to be consumed or stored as long as food/drink are covered or in a closed container.

The subcommittee prepared a draft table of who should set minimum area PPE requirements and when exceptions should be allowed (condensed version follows on next page):

<b>Technical Area</b>	<b>Responsible Party</b>	<b>Exemptions Allowed?</b>	<b>Food/Drink Allowed?</b>
Chemistry Lab/dedicated Chemical Storage Area	LBNL (Chemical Hygiene and Safety Plan)	Yes	No (cover food or use closed container when transporting food through area)
Machine, Craft, Welding, or Sheet Metal Shop	LBNL (PUB-3000, Ch 25)	Yes	No (exceptions allowed per Ch 25)
BioSafety Level (BSL) 1 & BSL 2 Laboratories	LBNL (Biosafety Manual)	Yes	No (cover food or use closed container when transporting food through area)
Areas controlled for radioactive contamination (e.g. Designated Work Area, Contamination Area, etc.)	RPG (work authorizations) Area Safety Leader (BUA review)	No	No
Areas within BSL1 or BSL2 Laboratory	Area Safety Leader (EHS review)	NA	No (cover food or use closed container when transporting food through area)
Other (incidental chemical use)	Area Safety Leader (EHS review)	NA	Yes (EHS review)
Other (temporary task-generated area hazard)	Area Safety Leader (EHS review)	NA	No (during task)
Other (no chemical use or machine tools)	Area Safety Leader	NA	Yes

Please note:

- All task-specific PPE requirements in PUB-3000 and PPE requirements in formal authorizations would take precedence over the table
- Incidental chemical use refers to:
  - Cleaning with common cleaning solvents such as acetone, ethanol, isopropanol, or methanol; and/or
  - Working with aqueous non-corrosive ( $2 < \text{pH} < 12.5$ ) solutions, such as diluted bleach, which do not contain strong toxins.
- Temporary task-generated area hazards include machine tool use, soldering, and wire-cutting.
- Rooms or areas may be identified within BSL1 or BSL2 laboratories where safety glasses are not needed due to tasks that are negatively impacted by safety glasses and the absence of eye hazards (microscope use for example).
- “Other” technical areas include mechanical assembly labs, electronic assembly labs, accelerator control rooms, laser labs, microscope labs.

The subcommittee is working on a list of Frequently Asked Questions (FAQs). This information could be placed in an appendix to Chapter 19. The table and FAQs will be sent out this month for comments.

There was a comment that Area Safety Leads are not a part of Line Management in some cases. There was another comment that door postings should be simplified, because people do not read the postings if there is too much information.

The new approach should be more like guidelines for the Area Safety Leads and less prescriptive. The Advanced Light Source has pilot tested a similar approach. Divisions are cautioned not to start implementing the proposed changes until they are finalized and communicated.

### **Division Priorities Discussion – Joe Dionne**

**Customer service** -- Joe Dionne is now the EHS Division Deputy for customer service. He will be interfacing with SAC on developing programs to address our safety priorities. Prior to coming to LBNL, he was Director of EHS for Clorox for 18 years. He had a two year assignment as operations manager for their Hidden Valley Ranch salad dressing production facility in Chicago. During that assignment, Joe found that consultants that met with the plant management and worked with them to implement changes were much more effective than consultants who just performed inspections and left a list of “findings” behind. The collaborative customer service approach will be a more effective model for the LBNL safety program than the traffic cop approach. The expectation for all EHSD folks will be to add value to their customer’s operations.

**Communications** -- EHS wants to work with SAC, the Division Safety Coordinators, and Public Affairs to develop the right tools to communicate safety expectations. The recent change in radiation signs was well communicated through several methods and could serve as a model. We need to determine what communication pathways are effective. Today at Berkeley Lab and email have been identified as preferred pathways in some surveys. Telephone Services has a voicemail broadcast tool. Divisions are different and there may not be one communication strategy that is the most effective for everyone. Divisions need some guidance on how to communicate safety changes. Customer feedback is useful. We need to know when a communication effort has reached the saturation point.

**Risk Management** -- The analysis of the PPE policy is an example of how to do risk management. We need to understand the risks, define the boundaries, and provide flexibility within the boundaries. SAC members with ideas about other issues that should be addressed should contact Joe Dionne and/or bring ideas to the next SAC meeting.

### **Work Planning and Control – Scott Taylor**

The Work Planning and Control group has been busy creating documents that define hazards and controls for activities. They need input on details for future users. Michelle Flynn will be meeting with Divisions in February. They are asking for at least one representative from each Division to form a Working Group. There will be multiple meetings during February – May 2012 to define business processes and system requirements. They are hoping to be ready to perform software tests in November.

### **Draft Accident/Incident Investigations Charter – Howard Hatayama**

LBNL is a “learning institution”, and this core value should set the tone for our investigations. How we analyze incidents has a significant impact on how people view their role in the process. It should be a constructive process. We should analyze beyond what happened and find out why it happened, to identify our underlying organizational strengths and weaknesses. We need to go beyond looking at individuals. Cultural factors drive reactions and behaviors. Focusing on the negative leads to a “dread factor”. We should look at the positive factors that helped prevent a problem from becoming worse. We need to look for effective, sustainable solutions. Rather than placing blame, we want to identify opportunities to improve. Only in rare situations are accidents caused by individuals choosing not to do the right thing. It will take time to build trust by establishing a record of positive investigations.

Discussion points from committee members and other attendees included:

- Investigations should use a graded approach, proportional to the incident. Formal chartered investigations should be used for root cause analysis level incidents. The principles of the charter apply to all levels;
- The investigation charter's approach ties in well with the Safety Culture effort;
- The results and lessons learned from investigations need to be widely communicated to the Lab community;
- We should strive for both deeper understanding and communication;
- Feedback from "consumers" of reports, including Division Directors, is needed;
- Some investigations have lacked close-out meetings;
- Trying to identify "all" causes could delay investigations;
- The investigation approach needs to be communicated because it has sometimes been difficult for investigators to talk to people.

The draft charter will be edited based on the input from the meeting and sent to Paul Alivisatos for review and approval.

**NOTE:** The Fiscal Year 2011 Self-Assessment Report is available. It reflects a lot of work and there is much useful information in it. Committee members are encouraged to read the report. (The report may be found through the Office of Contractor Assurance web page, under Assurance Reports; Function – Specific; Environment, Safety and Health; Annual ES&H Self-Assessment Reports. Access requires LBNL LDAP login.)

The meeting was adjourned at 2:30 PM

Respectfully submitted, Patricia M. Thomas, SAC Secretary